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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,775	06/01/2001	Bogdan Kosanovic	TI 32883	3244

23494 7590 04/19/2005

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EXAMINER	
VO, LILIAN	
ART UNIT	**PAPER NUMBER**
2195	

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/871,775	KOSANOVIC, BOGDAN	
	Examiner	Art Unit	
	Lilian Vo	2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/17/05*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 – 10, 12 – 14, 18, 20 and 25 - 33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 – 10, 12 – 14, 18, 20 and 25 - 33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 November 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 10, 12 – 14, 18, 20 and 25 - 33 are pending. Claims 11, 15 – 17, 19 and 21 – 24 have been cancelled.

Claim Objections

2. **Claims 1 and 5** are objected to because they contain the wrong punctuation mark at the end of the claims. Appropriate correction is required.

3. **Claim 30** is objected to because there are duplicate words such as "of each" in line 6. The examiner believes this a typographical error. Appropriate correction is required.

4. **Claim 31** is objected to because the examiner believes the word "withing" in line 2 is a typographical error. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 2 – 4, 6 – 8, 14, 18, 20, 26 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. **Claims 2 and 6** recite the limitations "the sum" and "the measured" in lines 2, 4 and 5. There is insufficient antecedent basis for this limitation in the claim.

8. **Claim 4** recites the limitation "the alarm" in line 4. There is insufficient antecedent basis for this limitation in the claim.

9. **Claim 14** recites the limitation "the total" in line 3. There is insufficient antecedent basis for this limitation in the claim.

10. **Claim 18** recites the limitation "the measured" in line 3. There is insufficient antecedent basis for this limitation in the claim. Also, line 5 recites the limitation "if a measured amount", is this referring to the same measured amount as stated above or a different one? For the purpose of the examination, the examiner will assume it is the same measured amount. Appropriate clarification is required.

11. **Claim 26** recites the limitation "the greatest" in line 3. There is insufficient antecedent basis for this limitation in the claim.

12. **Claim 32** recites the limitation "assign and allocation" in line 5. This is indefinite and unclear. The examiner believes this is a typographical error. Appropriate clarification is required.

Double Patenting

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 09/871,777.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the examiner can ascertain no difference between the claim of the present application and that of copending Application No. 09/871,777. It is noted that the minor difference encompass replacement of the recitation of the limitations in the claims and it appears to be substantially the same or duplicate or in some instance obvious over one another. For example, in the instant application, claim 1 functions performed by the steps are the same as the steps of claim 1 in the copending application, except the limitation a processor having a queue for holding a plurality of executable functions. It would have been obvious for an ordinary skill in the art at the time the invention was made to recognize that any system which allocate the processing resources to functions in a queue waiting to be executed is obviate for the system to

have a processor including a queue for holding a plurality of functions to be scheduled for execution.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. Claims 1 – 4, 9, 10, 12 – 14, 18, 20, 25, 26 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robertazzi et al. (US 6,370,560, hereinafter Robertazzi) in view of Baker-Harvey (US 6,385,638).

17. Regarding **claim 1**, Robertazzi discloses a system for allocating processing resources to functions in a queue waiting to be executed, comprising:

a processor having a queue for holding a plurality of executable functions including (col. 5, lines 52 – 61):

a capacity determining means for determining an amount of the processing resources that are available to be assigned (col. 3, lines 1 – 8, col. 6, lines 18 – 36);

a load determining means for determining the processing resources that are needed to execute each function waiting in the queue (col. 3, lines 3 – 4, col. 6, lines 18 – 36);

an allocating means for allocating the processing resources to the functions based on an allocation scheme (col. 2, lines 52 – 62, col. 5, lines 51 – 60).

As stated above, Robertazzi discloses a load determining means for determining an amount of the resource needed for each function waiting in the queue to execute, but failed to explicitly disclose that this amount determined is an estimate. However, it is well known to one of an ordinary skill in the art that the amount of resource needed can be estimated. It would have been obvious for one of an ordinary skill in the art, at the time the invention was made to include the feature of determining estimated resources to the existing system of Robertazzi because this would increase the effectiveness and accuracy of the allocation based on priority. From being able to know the estimated/expected/predicted amount before the allocation occurs, better planning can be performed.

Robertazzi failed to teach the processing resource is within a processor. Nevertheless, Baker-Harvey discloses the allocating and scheduling the available processing resource on a processor to tasks (abstract, col. 1, lines 65 – 67, col. 2, lines 1 – 8). It would have been obvious for one of an ordinary skill in the art, at the time the invention was made to include the feature of allocating and scheduling the available processing resource of a processor to computing tasks to ensure a minimum quality of service is provided to each running task (Baker-Harvey: abstract).

18. Regarding **claim 2**, as modified Robertazzi discloses:

a comparing means for comparing the sum of the measured amount of processing resources used to a high and a low threshold value (Robertazzi: col. 11, lines 55 – 67);

an alarming means interconnected with the processor for setting an alarm if the sum of the measured amount of processing resources used exceeds the high threshold value (Robertazzi: col. 11, lines 55 – 67).

19. Regarding **claim 3**, as modified Robertazzi discloses:

a throttling means for assigning a resource throttling value to each function waiting in the queue to be executed when the alarm is executed, wherein the throttling (reducing) value determines a reduction of the processing resources allocated to each of the functions (Robertazzi: col. 9, lines 10 – 25).

20. Regarding **claim 4**, as modified Robertazzi discloses:

a reducing means for controlling each function to prevent execution according to a degradation scheme when the alarm is executed (col. 11, lines 10 – 27 and 55 – 67).

21. **Claim 9** is rejected on the same ground as stated in claim 1.

22. Regarding **claim 10**, as modified Robertazzi discloses:

the functions are decomposed elements of a more complex process and do not require the same amount of resource to execute (Robertazzi: col. 2, lines 52 – 62, and col. 1, line 64 – col. 2, line 9).

23. Regarding **claim 12**, as modified Robertazzi discloses:

the processor assigns each of the functions a separate priority within a hierarchical priority scheme (Robertazzi: col. 2, lines 52 – 62, col. 5, lines 50 – 60).

24. **Claim 13,** as modified Robertazzi discloses the processor assigns each of the functions a separate priority within a round-robin scheme (Harvey: col. 5, lines 12 – 17, 31 – 39, col. 6, lines 10 - 11).

25. Regarding **claim 14**, as modified Robertazzi discloses:

the processor assigns a resource throttling value to each function waiting in the queue to be executed when the total processing capacity of the processor allocated to the functions exceeds a threshold (Robertazzi: col. 9, lines 10 – 25, col. 11, lines 55 – 67),

wherein the throttling value determines the reduction of the resource allocated to each of the functions according to a degradation scheme (Robertazzi: col. 9, lines 10 – 25).

26. **Claims 18 and 20** are rejected on the same ground as stated in claims 2 and 4 above.

27. Regarding **claim 25**, as modified Robertazzi discloses:

a measuring means connected to the processor for measuring an actual amount of the processing resources used (Robertazzi: col. 4, lines 60 – 66, col. 7, lines 61 – 66, col. 15, lines 60 – 63);

a revising means for determining a revised estimate of the amount of processing resources needed to execute each function waiting in the queue based on the measured amount of the processing resources used (Robertazzi: col. 9, lines 44 – 51. col. 11, lines 46 - 66); and

a reallocating means for reallocating the available amount of processing resources to the functions in accordance with the revised estimate and the hierarchical priority scheme (Robertazzi: col. 2, lines 52 – 62, col. 5, lines 51 – 60, col. 9, lines 44 – 51. col. 11, lines 46 - 66).

28. Regarding **claim 26**, as modified Robertazzi discloses:

the allocating means comprises an allocation scheme that reallocates the processing resources to the functions that have the greatest need, wherein the functions are parts of an algorithm that allows modification of its computational requirements (Harvey: col. 3, lines 47 – 59), and

removes the processing resources from, and prevents execution of, certain functions of the algorithm that need less resource allocations to execute the algorithm (Harvey: col. 3, lines 47 – 54).

29. Regarding **claim 33**, as modified Robertazzi discloses the determining means determines the processing resources within the processor for functions of one or more adaptive algorithms, wherein the one or more adaptive algorithms allow modification of their computation requirements (Harvey: col. 3, lines 10 – 24).

30. Claims 5 – 8, 27, 28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robertazzi et al. (US 6,370,560, hereinafter Robertazzi) in view of Baker-Harvey (US 6,385,638), and further in view of Chau et al. (US 5,805,827, hereinafter Chau).

31. Regarding **claim 5**, Robertazzi discloses a system for allocating processing resources to functions in a queue waiting to be executed, comprising:

a capacity determining means for determining an amount of the processing resources that are available to be assigned (col. 3, lines 1 – 8, col. 6, lines 18 – 36);

a load determining means for determining the processing resources that are needed to execute each function waiting in the queue (col. 3, lines 3 – 4, col. 6, lines 18 – 36);

an allocating means for allocating the processing resources to the functions based on a hierarchical priority scheme (col. 2, lines 52 – 62, col. 5, lines 51 – 60).

As stated above, Robertazzi discloses a load determining means for determining an amount of the resource needed for each function waiting in the queue to execute, but failed to explicitly disclose that this amount determined is an estimate. However, it is well known to one of an ordinary skill in the art that the amount of resource needed can be estimated. It would have been obvious for one of an ordinary skill in the art, at the time the invention was made to include the feature of determining estimated resources to the existing system of Robertazzi because this would increase the effectiveness and accuracy of the allocation based on priority. From being able to know the estimated/expected/predicted amount before the allocation occurs, better planning can be performed.

Robertazzi did not disclose the processing resource is within a processor. Nevertheless, Baker-Harvey discloses the allocating and scheduling the available processing resource on a processor to tasks (abstract, col. 1, lines 65 – 67, col. 2, lines 1 – 8). It would have been obvious for one of an ordinary skill in the art, at the time the invention was made to include the feature of allocating and scheduling the available processing resource of a processor to computing tasks to ensure a minimum quality of service is provided to each running task (Baker-Harvey: abstract).

Neither Robertazzi nor Baker-Harvey disclose the system with a processor having a communication port that connected to the communication channel. Nevertheless, Chau discloses a system with a processor having at least one communication port that connects to a communication channel (abstract and fig. 1). It would have been obvious for one of an ordinary skill in the art, at the time the invention was made to modify Robertazzi's system with Baker-Harvey and Chau's features to better manages the utilization of processing resources to accomplish processing task on high bandwidth data channels, particularly in communication server which interface to several input/output ports.(Chau: col. 1, lines 43 – 47).

32. Regarding **claim 6**, as modified Robertazzi discloses:

a comparing means for comparing the sum of the measured amount of processing resources used to a high and a low threshold value (Robertazzi: col. 11, lines 55 – 67);

an alarming means interconnected with the processor for setting an alarm if the sum of the measured amount of processing resources used exceeds the high threshold value (Robertazzi: col. 11, lines 55 – 67).

33. Regarding **claim 7**, as modified Robertazzi discloses:

a throttling means for assigning a resource throttling value to each function waiting in the queue to be executed when the alarm is executed, wherein the throttling (reducing) value determines a reduction of the processing resources allocated to each of the functions (Robertazzi: col. 9, lines 10 – 25).

34. Regarding **claim 8**, as modified Robertazzi discloses:

a reducing means for controlling each function to prevent execution according to a degradation scheme when the alarm is executed (col. 11, lines 10 – 27 and 55 – 67).

35. Regarding **claim 27**, as modified Robertazzi discloses:

the allocating means comprises an allocation scheme that reallocates the processing resources to the functions that have the greatest need, wherein the functions are parts of an algorithm that allows modification of its computational requirements (Harvey: col. 3, lines 47 – 59), and

removes the processing resources from, and prevents execution of, certain functions of the algorithm that need less resource allocations to execute the algorithm (Harvey: col. 3, lines 47 – 54).

36. Regarding **claim 28**, as modified Robertazzi discloses:

a measuring means connected to the processor for measuring an actual amount of the processing resources used (Robertazzi: col. 4, lines 60 – 66, col. 7, lines 61 – 66, col. 15, lines 60 – 63);

a revising means for determining a revised estimate of the amount of processing resources needed to execute each function waiting in the queue based on the measured amount of the processing resources used (Robertazzi: col. 9, lines 44 – 51. col. 11, lines 46 - 66); and

a reallocating means for reallocating the available amount of processing resources to the functions in accordance with the revised estimate and the hierarchical priority scheme (Robertazzi: col. 2, lines 52 – 62, col. 5, lines 51 – 60, col. 9, lines 44 – 51. col. 11, lines 46 - 66).

37. Regarding **claim 31**, as modified Robertazzi discloses the determining means determines the processing resources within the processor for functions of one or more adaptive algorithms, wherein the one or more adaptive algorithms allow modification of their computation requirements (Harvey: col. 3, lines 10 – 24).

38. Claim 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robertazzi et al. (US 6,370,560, hereinafter Robertazzi) in view of Baker-Harvey (US 6,385,638), and further in view of Chau et al. (US 5,805,827, hereinafter Chau), as applied to claim 5 above, and further in view of Applicant's admitted prior art (hereinafter AAPA).

39. Regarding **claim 29**, as modified Robertazzi discloses the load determining means comprises an estimating means for estimating processing resource consumption of each function (Harvey: fig. 3 and col. 7, lines 44 – 49), and for updating said consumption processing resource estimation when a state of each function changes (Harvey: col. 5, lines 36 – 39, 54 - 57). Modified Robertazzi did not specifically disclose the processing resource including the millions of instruction per second (MIPS). Nevertheless, AAPA discloses that processor resource including MIPS which can be allocated to one or more functions or multiple states of a function is considered well know in the art (specification page 1, lines 19 – 22). It would have been obvious for one of an ordinary skill in the art, at the time the invention was made, to incorporate AAPA's teaching to modified Robertazzi so that a variety of computing resources can be considered for better planning and more efficient in resource allocation.

40. Regarding **claim 30,** as modified Robertazzi discloses the allocating means comprises an assigning means for assigning an allocation of processing resources, within the processor, for determining a total processing resource available within the processor available for processing (Robertazzi: col. 3, lines 1 – 8 and col. 6, lines 18 – 36), and for assigning an allocation of processing resource for execution of each function according to the allocation scheme (Robertazzi: col. 2, lines 52 - 62 and col. 5, lines 51 – 60). Modified Robertazzi did not specifically disclose the processing resource including the millions of instruction per second (MIPS). Nevertheless, AAPA discloses processor resource including MIPS which can be allocated to one or more functions or multiple states of a function is considered well know in the art (specification page 1, lines 19 – 22). It would have been obvious for one of an ordinary skill

in the art, at the time the invention was made, to incorporate AAPA's teaching to modified Robertazzi so that a variety of computing resources can be considered for better planning and more efficient in resource allocation.

41. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robertazzi et al. (US 6,370,560, hereinafter Robertazzi) in view of Baker-Harvey (US 6,385,638), as applied to claim 9 above, and further in view of Applicant's admitted prior art (hereinafter AAPA).

42. Regarding **claim 32,** as modified Robertazzi discloses the allocating means comprises an assigning means for assigning an allocation of processing resources, within the processor, for determining a total processing resource available within the processor available for processing (Robertazzi: col. 3, lines 1 – 8 and col. 6, lines 18 – 36), and for assigning an allocation of processing resource for execution of each function according to the allocation scheme (Robertazzi: col. 2, lines 52 - 62 and col. 5, lines 51 – 60). Modified Robertazzi did not specifically disclose the processing resource including the millions of instruction per second (MIPS). Nevertheless, processor resource including MIPS which can be allocated to one or more functions or multiple states of a function is considered well know in the art and further disclosed by AAPA (specification page 1, lines 19 – 22). It would have been obvious for one of an ordinary skill in the art, at the time the invention was made, to incorporate AAPA's teaching to modified Robertazzi so that a variety of computing resources can be considered for better planning and more efficient in resource allocation.

Response to Arguments

43. Applicant's arguments with respect to claims 1, 5 and 9 have been considered but are moot in view of the new ground(s) of rejection.

44. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a method to divide and change the computational load on executable functions, page 15, 2nd paragraph) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

45. Regarding applicant's argument that the prior art fails to teach or suggest "a capacity determining means...of the processing resources within the processor" (page 15, 2nd paragraph last sentence and 3rd paragraph, 1st sentence and last paragraph), applicant is directed to the new ground of rejection as stated above.

46. Regarding applicant's argument that the prior art fails to teach or suggest "a load determining means...of the processing resources within the processor" and "an allocating means for allocating the processing resource within the processor ..." (page 15, last paragraph – page 16, 1st paragraph, 1st sentence, page 18, 2nd paragraph, 4th sentence), applicant is directed to the new ground of rejection as stated above.

47. With respect to applicant's remark that "Robertazzi's controller cannot modify the computational requirement of the loads 'within the processor'," the examiner disagrees. Robertazzi discloses the reallocating of portion of its load to other processor platforms (col. 13, lines 15 – 21). Thus, this indicates that Robertazzi's system is capable of modifying the computational requirement of the loads within the processor.

48. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "the claimed invention defines and allocates processing resources to functions of one or more algorithms... these functions are from an algorithm that allows modification of the computational requirements...", page 16, last paragraph – page 17, 2nd paragraph, 3rd sentence, page 18, 2nd paragraph, 5th sentence, page 19, 1st paragraph, page 20, last paragraph, last sentence) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

49. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "the invention changes the load on a single processor without risking system performance and without requiring additional hardware... ", page 19, last paragraph – page 20, 2nd paragraph) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations

from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

50. With respect to applicant's remark that "it is well that one of an ordinary skill in the art at the time the invention was made to include the option of estimating the amount to the existing system of Robertazzi because it would increase the accuracy of the mount of the resources needed thus improving overall planning of the system and resources" is incorrect (page 20, last paragraph), the examiner acknowledge applicant's submission. However, the examiner maintains the position that it would have been obvious for one of an ordinary skill in the art, at the time the invention was made to include the feature of determining estimated resources to the existing system of Robertazzi because this would increase the effectiveness and accuracy of the allocation based on priority. From being able to know the estimated/expected/predicted amount before the allocation occurs, better planning can be performed.

51. Applicant's arguments for claims 2 – 4 (page 21, last paragraph) fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

52. In response to applicant's argument that there is no suggestion to combine the references (page 22, 3rd paragraph), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the

claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation for the rejection is found in Chau reference col. 1, lines 43 – 47 as stated above.

53. In response to applicant's arguments against the references individually (page 22, 3rd paragraph), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

54. In response to applicant's argument that "the examiner has attempted to identify in the separate pieces of prior art each individual part claimed ...is insufficient to defeat patentability of the whole claimed invention" (page 22, 3rd paragraph, last two sentences), the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

55. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "the system estimates the amount of processing resources needed in the processor for each instance to execute in the same time period...", page 22, last paragraph, last two sentences – page 23, 1st paragraph, 1st two sentences) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

56. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Al-Hilali et al. (US 6,086,618) disclosed a method for estimating total resource usage requirements for each transaction. Culbert (US 5,838,968) disclosed a method for dynamic resource management across tasks in real-time operating systems.

57. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilian Vo whose telephone number is 571-272-3774. The examiner can normally be reached on Monday - Thursday, 7:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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April 13, 2005

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PRIMARY EXAMINER